2.2.4.2 Payload Elements

For convenience, the ADS-B Message payload is organized into *payload elements*. These elements contain the individual message *fields* (e.g., LATITUDE, ALTITUDE, etc) that correspond to the various report elements issued by an ADS-B Receiving Subsystem to an application system as defined in the ADS-B MASPS, RTCA Document DO-242A. Payload elements and their lengths are shown in Table 2-7.

Table 2-7: ADS-B Payload Elements

Payload Element	Payload Bytes	Applicable DO-242A Reports	Subparagraph References
HEADER (HDR)	4	All	2.2.4.5.1
STATE VECTOR (SV)	13	State Vector	2.2.4.5.2
MODE STATUS (MS)	12	Mode Status	2.2.4.5.4
AUX. STATE VECTOR (AUX SV)	5	State Vector, Air Reference Velocity	2.2.4.5.5
TARGET STATE (TS)	~~5~~ 4	Target State	2.2.4.5.6 2.2.4.5.7
TRAJECTORY CHANGE +0 (TC+0)	12	Trajectory Change	2.2.4.5.8
TRAJECTORY CHANGE +1 (TC+1)	12	Trajectory Change	2.2.4.5.8

2.2.4.3 ADS-B Payload Composition by Payload Type Code

Table 2-8 provides the assignment of payload elements to each Payload Type Code.

Table 2-8: Composition of ADS-B Payload

Payload Type Code	ADS-B Message Payload Byte Number						
	1 ---- 4	5 ---- 17	18 --------- 24	25 ---- 28	29	30 --- 33	34
0 *(Note 1)*	HDR	SV	*Res*	*Byte 19-34 Not present in Type 0*			
1	HDR	SV	MS			AUX SV	
2	HDR	SV	*Reserved (Note 2)*			AUX SV	
3	HDR	SV	MS			TS	*Res*
4	HDR	SV	*Reserved for TC+0 (Note 2)*			TS	*Res*
5	HDR	SV	*Reserved for TC+1 (Note 2)*			AUX SV	
6	HDR	SV	*Res. (Note 2)*	TS	*Res*	AUX SV	
7	HDR	SV	*Reserved (Note 3)*				
8	HDR	SV					
9	HDR	SV					
10	HDR	SV					
11 through 29	HDR	*Reserved (Note 2)*					
30, 31	HDR	Reserved for Developmental Use (*Note 4*)					

Notes:

1. *Payload Type 0 is conveyed in the Basic ADS-B Message; byte 18 is reserved for future definition.*

2. *Not defined in this MOPS. Reserved for definition in future versions.*

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